

Third Annual International Conference «Early Childhood Care and Education»

Pedagogical Skills of the Teacher and the Degree of Creative Self-realization of a Student in Conditions of University Educational Space

Valerian F. Gabdulchakov*

*Kazan (Volga) Federal University, Institute of psychology and education, Department of psychology of preschool education
Kremlevskaya st., 18 Kazan 420008 Russia*

Abstract

The article shows the dependence of the creative activity of the student from the creative potential of a teacher. Dependency analysis allowed determining the quality of a teacher required for successful communication activities in the classroom. Consequently, the indicators of the personification of the educational communication at the university include: personal indicator (degree of self-identity of the student); empathic indicator (teacher's ability to take the student's place and see the world with his eyes); reflective indicator (emotional field of the studies, the field of joy, wonder, admiration and happiness); cognitive indicator (consideration of the individual student and the teacher's values); an interactive indicator (the unity of conscious and subconscious); core indicator (the implementation of the communicative core in communication and learning and cognitive activity); integrative indicator (integration of educational content); nature-align indicator (individual personality development rate); attractive indicator (attractiveness of content and form of classes); resulting indicator (practical orientation of the content of lessons).

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Selection and peer-review under responsibility of Russian Psychological Society.

Keywords: The creative activities of students, the creative potential of a teacher, communicative activity of the teacher, the quality of communication activities (personal, integrated, individual and other).

* Corresponding author. Tel.: +89050260544.

E-mail address: Pr_Gabdulchakov@mail.ru

1. Introduction

In this article we examined the relationship between teacher's pedagogical skills and a student's creative self-realization in the conditions of educational space of University - in curricular and extracurricular activities. This relationship is significant for the projecting of personalized education in the University [1, 2].

The essence and purpose of the study was to identify the indicators of pedagogical skills of a teacher, that really correlate with certain indicators of creative self-realization of a student's personality.

Hypothetically we assumed that the degree of creative self-realization of a student is high if the level of teacher's pedagogical skills is high. For that matter we also tried to answer a question of whether there is any correlation between these two phenomena (the student's creative self-realization and the teacher's pedagogical skills).

The novelty of the research consists in defining the indicators of pedagogical skills of a teacher, which really improve the effects of creative self-realization of the student. The study was performed in Kazan (Volga Region) Federal University in the course of Humanities teaching in Russian and English. 354 curricular and 122 extracurricular classes were analyzed.

2. Method

- rank correlation by Charles Edward Spearman;
- the Sixteen Personality Factor Questionnaire by R. B. Cattell;
- the Values scales based on the M. Rokeach method.

3. Key terms

Personification of education — arrangement of conditions for creative self-development, self-actualization of the student's personality.

Pedagogical skills of the teacher - a high degree of creative teacher's attitudes towards the organization of the communication with the student.

Creative self-realization of personality of a student is a high degree of creative attitude to education, self-esteem and success in educational activities.

Indicators of pedagogical skills are the main indicators of the pedagogical skills of a teacher which correlate with a high level of creative self-realization of a student.

Personification and developing education

In the conditions of personification, when it is necessary to create conditions not only for the individualization of learning but also for organization of the process of personal and professional self-actualization, the correlation between the level of pedagogical skills of the teacher and the degree of creative self-realization of the student is of special interest.

It is known that education should be developing. If education does not help a person to realize, if it does not develop the person, the question arises, is it really education? Development processes can be lost on the developing person without becoming the events in his(her) life [3]. “Subjectless” development and “subjective” education out of the educational system itself is a paradox, but it is a fact of history and numerous biographies.

3. Results and discussion

The degree of creative self-realization of a student's personality was ranged in 3 levels: the 1st is low, the 2nd is medium, the 3rd is high. As a result of approbation in 1998-2013 of different technological procedures of

support and developing of students we have worked out and tested the indicators for assessing the quality of professional skill of a teacher [3].

For this, we used a methodology of rank correlation.

Rank correlation by Charles Edward Spearman is one of the easiest ways to establish a measure connection between the factors [4, 5, 6, 7, 8, 9, 10, 11, 12]. The very name of the method indicates that the relationship is defined between ranges, i.e. the sequence of the quantitative values, ranked in decreasing or increasing order. For the calculation of Spearman rank correlation it is necessary to have two sequences of values that can be ranked. Such series of values can be: 1) two characteristics measured in the same group of subjects; 2) two individual hierarchy of characteristics, identified in two people on the same set of features (e.g. personality profiles according to Cattell's 16 PF questionnaire, the Rokeach Values scales, the sequence of preference in the selection of alternatives and other); 3) two group hierarchies of characteristics; 4) individual and group hierarchies of characteristics. First, the indicators are ranked separately for each of the criteria. As a rule, less characteristic value has a less rank.

Practical calculation of Spearman's rank correlation index includes the following stages:

- 1) to match each of the characteristics with its order number (rank), ascending or descending.
- 2) to determine the ranks difference in each pair of matching values.
- 3) to square each difference and summarize the achieved results.

$r = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$: the correlation coefficient of ranks by the formula:

where $\sum d^2$ is the sum of squares of the ranks differences, and n is the number of paired observations.

When we use the rank correlation coefficient we conditionally evaluate the closeness of the connection between the characteristics, considering the value of the coefficient equal to 0.3 or less to be weak correlation of the closeness of the links; the value more than 0.4, but less than 0.7 to be moderate closeness of links and values of 0.7 or higher to be the indicators of high closeness of links.

Mathematical correlation value is expressed by its coefficient from -1 (maximum negative correlation) to +1 (maximum positive correlation) by decimal fractions accurated to the second decimal place.

Quantitative measure of correlation is typically distinguished by several levels: weak relation – at correlation coefficient up to 0.30, medium relation – at correlation coefficient from 0.31 to 0.69, and strong relation – at correlation coefficient from 0.70 to 0.99.

Table 1. Ranks of the indicators of involvement of students in the communication

Student's No	1	2	3	4	5	6	7	8	9	10	11
Ranks of the indicators of involvement of students in the communication	3	5	6	1	4	11	9	2	8	7	10
Ranks of effectiveness of educational and creative activity	2	7	8	3	4	6	11	1	10	5	9
D	1	-2	-2	-2	0	5	-2	1	-2	2	1
D²	1	4	4	4	0	25	4	1	4	4	1

To solve this problem were first ranked the indicators of involvement of students in the communication, received in monitoring practice, and, secondly, the result indicators of effectiveness of educational and creative activity at the end of the year, for the same students on average. The results are presented in table 1.

Then we substitute the obtained data in the formula and do the calculations. The levels of significance in this table are found by the number n i.e., by the number of people under test.

And we make the appropriate “axis of significance”:

The resulting correlation coefficient coincides with the critical value for the level of significance at 1%. Therefore, we could claim that indicators of involvement of students in communication and the results are

associated with positive correlation relationship, in other words, the higher is the involvement of the student in communication, the higher is the level of education and creative activities. In terms of statistical hypotheses we must reject the null hypothesis of convergence and accept an alternative one of differences, which suggests that the relationship between indicators of involvement in the communication and the average performance of educational and creative activity) is different from zero.

The correlation coefficient is equal to 1, obtained in our research suggests that there is a functional relationship. If changing one factor does not influence the size of the other, there is no connection, i.e. these factors are neutral.

4. Method of getting the results

We marked the following indicators of personification of the educational communication at the University.

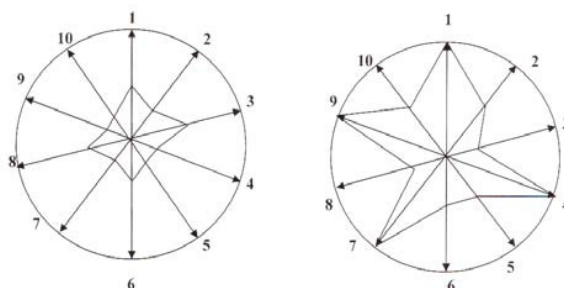
1. Personal indicator (degree of self-realization of a student's personality). In accordance with the new - personal developing paradigm of education - this indicator focuses on the diagnosis of the degree of self-realization of the student's individuality. In terms of educational psychology the formal sign of fixing this indicator could be students' verbal intention whether they use phrases like "I think", "I believe" etc in communication with the teacher, i.e. whether the teacher permits the presence of a second «I» in his class, whether he lets this «I» to be the first but not the second (after the "I" of the teacher). The advanced level of such communication may be seen when the students have the role of not blind performers but real researchers in psychology, pedagogy, methodology etc). Consequently, creative teacher should be skillful in project, problem and other methods, which allow to organize such activities in the learning environment. The highest level of creative self-realisation of students is when they not only carry out the research (or any other creative) activities, but also have reasonable and interesting ideas and projects that can enrich the modern theory and practice of education. In accordance with these characteristics we can distinguish the following levels for formal use: *the 1st level*. Whether the students use «I think», «I believe» and others in their responses? *The 2nd level*. Do the students have any plan of creative activity? *The 3rd level*. Do the students suggest their ideas or projects?

2. Empathic indicator (the teacher's ability to take the place of a student and see the world with his eyes). This indicator appeals to the teacher's personality, but not in terms of his personal self-realization, but in terms of the ability to establish personal (psychological) contact, dialogue with the trainees, i.e. whether a teacher can understand his values, see the world with his eyes and experience the feelings of his student. It is important, how he addresses his students: whether he calls them by name, it is important if a teacher says these names sincerely, friendly, with irony, humor, admiration, etc), or he uses their surnames, or maybe, uses the impersonal form of communication («you»). Who the students see in the lecture: the personality of the teacher, the scientist's personality, personality of an honest and intelligent person, or perhaps they see a daydreamer, a deadbeat, a fool, an envious, unhappy person or someone else depends on this. It is important for us how the teacher (educator, scientist) realizes himself as a person (in terms of his human qualities). In accordance with this for a formal data handling we can use the following questions: the 1st level. Can teacher make confidential contacts due to his appearance and voice? The 2nd level. Does the teacher refer to the students by personal forms (does he use names)? The 3rd level. Does the teacher show up his personality in his lectures?

3. Reflexive indicator (emotions in classes, joy, wonder, admiration and happiness). One of the most problematic indicators, as the traditional stereotype of a Russian teacher, a scientist is a stereotype of a poor, humiliated and unhappy person. In addition, in people's minds there is an idea that it is inappropriate and impossible to be happy in Russia. This is connected with the traditional national ethno-cultural type, formed in Russian culture by works of Griboedov («Woe from wit»), Nekrasov («Who lives well in Russia?»), Lermontov («A Hero of our time»), Alexander Pushkin («Eugene Onegin»), and other - that is, the type of a miserable person. Therefore, the ability of the teacher to create comfortable working conditions in the lesson, to create emotions of surprise, and even pleasure, joy, excitement, happiness is a serious indicator of professional

skill. Full reflection in the psychological sense arises when a teacher reflects his own ego and a student (with the help and support of the teacher) his own ego. The contact of these egos creates a special reflexive field — warm climate, emotional enthusiasm, joy and happiness. In accordance with this mindset (the set for creating a reflexive field) we can distinguish the following levels of demonstration of reflexive factor: the 1-St level. Can the teacher create comfortable conditions for communication? The 2nd level. Does the communication create surprise and emotional rise? The 3rd level. Do the communicators (teacher and students) experience pleasure, joy, happiness during their communication?

4. Cognitive indicator (student's and teacher's values accounting). This indicator is also contrary to the established pedagogic traditions. The matter is that in pedagogy it is generally believed that if a teacher teaches Math, he loves Math and he plants this love for the subject to his students. The practice analysis shows, that the teacher may have different attitudes to the subject: he may love his subject, and he may know it, but not love, he can hate it, but still teach it for all his life, i.e. plant love for the subject in his students. At first glance, it seems that only a loving his subject teacher can plant love for the subject in his students. But practice shows that this argument does not always work: sometimes a scientist (a teacher) who loves Math plants hate for the subject in his students. And sometimes a teacher who is not very professional, and doesn't love it much can teach love and keen interest in his students. Why? In these cases the ability of the teacher to organize cognitive forms of activity, i.e. organize the lesson, intrigue, enter the pupils in a situation of «waiting effect of the unexpected» when once the result of joint educational-cognitive activity falls into a trap of memory» of a student and becomes its own domain becomes the most important. Here we face non-standard forms of organizing a lesson. Formally, this indicator may be expressed in the following levels: The 1st level. Does the teacher speak about their preferences in the subject (grammar, mathematics, physics etc)? The 2nd level. Is the purpose of communication to form positive values among students (in unobtrusive fun way)? The 3rd level. Do the students show their commitment to positive values in the subject?



The initial sphere of the teacher's pedagogical skill (fig. 1) and the final sphere of the teacher's pedagogical skill (fig. 2).

The use of these indicators allows to judge the teaching activity of the teacher as art. The distribution of the degree of manifestation of an indicator of the levels can execute specific diagnostic cards for each teacher. If you place these indicators on the radius of the circle and connect the points of their display in class with a continuous line, we'll have a figure that reflects the developmental (creative) field of each teacher individually.

The reliability of the pattern configuration is ensured by the picture overlay and alignment obtained at least by 5-7-lessons conducted in one or two or three days. Map looks like a circle that is intersected by the radius-indicators.

Thus 354 studies were analyzed.

The first figure shows a general version of the field of developmental studies (field of pedagogical skills) - field which is oriented at creating an atmosphere of creativity, in the beginning of the experiment. The second figure shows the average data of the developing field of classes after the experiment. The area of the field increased, which means that training and developing potential increased, creative atmosphere necessary for the self-realization of creative personality of the student increased.

Unexpected results showed the third indicator (reflective) and the 8th one (nature-aligned): in the second picture these indicators were less than in the first. The growth of 8 indicators resulted in a decline of 2, although the total area of developing field (the field of pedagogical skills) was more than 2 times larger than the first. Indicators related to each other, they reveal different aspects of the same phenomenon - pedagogical skills of the teacher. As for these two, they are correlated with the creative self-realization of the student, the teacher's less attention to these indicators can improve the effectiveness of creative self-identity of the student.

5. Conclusion

Thus, we have found out that indicators of pedagogical skill of the teacher can be 10 indicators: they correlate with leveled hierarchy of creative self-identity of the student.

Consequently, the indicators of the personification of the educational communication at the university include: personal indicator (degree of self-identity of the student); empathic indicator (teacher's ability to take the student's place and see the world with his eyes); reflective indicator (emotional field of the studies, the field of joy, wonder, admiration and happiness); cognitive indicator (consideration of the individual student and the teacher's values); an interactive indicator (the unity of conscious and subconscious); core indicator (the implementation of the communicative core in communication and learning and cognitive activity); integrative indicator (integration of educational content); nature-align indicator (individual personality development rate); attractive indicator (attractiveness of content and form of classes); resulting indicator (practical orientation of the content of lessons).

Promising and controversial for research are also other indicators of pedagogical skills of the university teacher related to teaching techniques, technologies of training and education, technology of organizing tutoring of self-education and creative self-development of a student's personality. These indicators are not defined yet and have not received the status of indicators of pedagogical skills. Controversial for Russia remain reflective and nature-align indicators. Do we need to intensify them or not? Our study shows that we don't.

Reference

- [1] Gabdulchakov VF. Of linguistic education in kindergartens. *International Journal of Early Years Education* 2011; 19(2): 185-188.
- [2] Gabdulchakov VF. *Tvorcheskaya aktivnost uchitelja: componentnaya tehnologija* [Tutor creative activity: components technology]. Kazan: Kazan Federal University; 2013.
- [3] Kudryavtsev VT. Education – “Groundhog Day” or “gap template”? *Modern pre-school education. Theory and practice* 2012; 5(31): 34-39.
- [4] Lemen fuer die Arbeitswelt: *Bildung und Wissenschaft* 1995; 4: 2-32.
- [5] McIntire JA. How all middle-schoolers can be “gifted”. *The education digest* 1998; 63(9): 57-61.
- [6] Miller A. *Das Drama des begabten Kindes und die Suche nach dem wahren Selbst*: Eine Um- u. Fortschreibung, Frankfurt am Main: Suhrkamp; 1997, p. 34-45.
- [7] Norton R, Domen G. Gifted Children. *The Elementary School J.* 1984; 3: 298-300.
- [8] Plank SB, MacIver DJ. Aiming poor urban kids toward college. *The education digest* 1998; 63(6): 34-36.
- [9] Feldhusen JF. Programs for the gifted few or talent development for the many? *Phi Delta Kappan* 1998; 79(10): 735-763.
- [10] Spearman C. Proof and measurement of association between two things. *American Journal of Psychology* 1904; 15: 72-101.
- [11] Spearman C. Demonstration of Formulae for True Measurement of Correlation. *American Journal of Psychology* 1907; 18(2): 21-67.
- [12] Spearman C. *The nature of intelligence and the principles of cognition*. 2 ed. London; 1930, p. 34-68.